2005
WISCONSIN CANADA GOOSE HARVEST REPORT
Volume 15, Issue 3


Courtesy Jack Bartholmai

Kent Van Horn
Bureau of Wildlife Management

Kimberlee Benton
Bureau of Wildlife Management

Brian Dhuey
Bureau of Integrated Science Services

2005 Regular Season Canada Goose Harvest

Zone	Zone Allocation	Est. Harvest	% of Allocation
Collins	800	452	57%
Horicon	21,000	12,026	57%
Exterior	40,700	35,126	86%
TOTAL	62,500	47,604	76%

WISCONSIN 2005 CANADA GOOSE HARVEST REPORT

INTRODUCTION

The management of Canada geese populations and hunting recreation has been a social and biological challenge for the state of Wisconsin since the 1950's (Miller 1998). Continental Canada goose management is based on several different breeding populations. The fall population of Canada geese in Wisconsin consists primarily of 2 populations. One population is the Mississippi Valley Population (MVP) that breeds along the southern Hudson Bay Coast in Ontario and migrates south primarily through Wisconsin and Michigan, and then Illinois, Indiana, and western Ohio. Most birds move no further south than Kentucky and Tennessee although some go as far south as Mississippi (MVP plan 1998, Leafloor et al. 2003). A second major population of geese is the resident or giant race that breeds in WI. Based on banding data a small percentage of Wisconsin's goose harvest (~3%) also comes from the Eastern Prairie and Tall Grass Prairie Populations. The Mississippi Flyway Council (MFC) was established in 1952 to work cooperatively among the states, provinces and federal governments in the management of migratory birds and in 1956 the MFC established a Canada Goose Committee to manage the harvest and distribution of several Canada goose populations in the Flyway.

In the 1950's the MVP was the primary population of Canada geese in Wisconsin while the giant race was considered nearly extinct in the Flyway. During this period, Horicon National Wildlife Refuge in WI began managing specifically to support migrating MVP during the fall. Landscape changes, Horicon refuge management and an expanded refuge system in Illinois all contributed to an increase in fall/winter Canada goose populations and harvest levels in both states. In 1960 Wisconsin and Illinois agreed to establish a harvest quota system to cooperatively manage goose harvest and despite a number of changes a quota system still remains. During the early 1960's MVP geese steadily increased in numbers at Horicon with fall numbers exceeding 100,000 geese and harvest near 1,000 geese per day for only a 9-11 day season. This growing fall goose population began to cause significant agricultural crop depredation in WI and complaints by hunters in states to the south that WI was short stopping geese (Miller 1998). In 1965 agricultural damage payments began as a result of goose depredation in east central WI. Over a period of several years in the 1960's social, political and biological forces surrounded goose management and resulted in actions such as hazing and a harvest of 30,000 geese in 3 days of shooting in 1966. In 1965 the MFC agreed to a winter Flyway population objective of 200,000 and in 1969 this was increased to 300,000. Several states in the Flyway wished to see an increase in the MVP goose population and a greater distribution of these birds to the south of WI while WI managers continued to express concern over increased goose concentrations in east central WI.

In the 1970's up to 80% (250,000-300,000 birds) of the MVP winter population stopped at the Horicon and surrounding areas (Miller 1998). Agricultural and biological concerns over this concentration of birds lead to the 1976 management strategy to reduce the peak fall population and encourage birds to move south. Altering land management in the Horicon NWR, and increased harvest and disturbance helped to move geese out of the refuge but not necessarily to locations outside of WI. However, many hunters and goose watchers in Wisconsin opposed these efforts to redistribute goose concentrations. A number of biological and political concerns

complicated management efforts. In 1979 the MFC prepared the first Flyway-wide management plan for the MVP in an attempt to create a more scientifically based management strategy. Revisions of this plan continue to guide the management of the MVP population.

Meanwhile, a few small remnants of the giant race of Canada geese were discovered in southern WI and elsewhere in the Flyway during the 1950's and 1960's. Restoration efforts to increase this population began in the 1960's and involved releasing of birds from captive reared populations, translocation of birds within and among states and provinces, and closure of Canada goose hunting in some areas (MF Giant Canada goose management plan 1996). Now giant Canada geese are the most abundant subspecies in the Flyway (Leafloor et al. 2003). The increase in the giant population began in urban and rural areas of southeast WI and this area remains an area of increasing resident goose densities. Giant Canada geese have adapted well to the urban, suburban and agricultural landscapes in Wisconsin resulting in an increasing population and expanding distribution across the state. With this increasing population and distribution come both problems with agricultural damage and urban nuisance geese as well as increased hunting and viewing opportunities. Harvest derivations indicate that giants are now 49% of the WI regular season Canada goose harvest and nearly all of the early September season harvest. The breeding population of giants has steadily increased for the last several years.

The current MVP management plan provides the basis for evaluation and management of the MVP population and harvest. The annual harvest quota is determined using the breeding population estimate (breeding adults) produced by the Ontario Ministry of Natural Resources as a trigger to determine different harvest levels. Based on the total MVP harvest level, the harvest quota is distributed among the major and minor harvest states as follows; WI –35%, IL –33%, MI 20%, KY 12% and the minor harvest states a collective harvest of 80,500. Annual harvest derivations for each state indicate the percentage of the annual Canada goose harvest for each state that comes from MVP, resident Giants or other populations. The total harvest quota for the state of Wisconsin is determined by applying the most recent derivations to the MVP harvest allocation.

As part of the cooperative agreement with the MFC, WI is required to monitor and control harvest of Canada geese in order to stay within our allotted quota. This report is a summary of the 2005 management of harvest.

BREEDING POPULATIONS

In 2005, the breeding surveys for MVP geese in northern Ontario indicated a better production year than 2004 (Walton and Hughes June 2005). The breeding population was estimated at 344,907, a 25 percent increase from 2004 numbers but still a little lower than the average of the previous 16 years. This allowed an average harvest quota to be allocated to the quota states in the Mississippi Flyway including Wisconsin. Using the harvest derivations calculated in 2005 for MVP and giant proportions in WI, a statewide quota of 62,500 geese was established. This quota was distributed among the 3 zones as follows; 40,700 Exterior, 21,000 Horicon and 800 Collins. In addition, Wisconsin's 2005 breeding population estimate for giant Canada geese showed a 17 percent decline

from 2004. However, the 2005 estimate of 124,000 is still well above the long-term average of 67,000 and is generally consistent with a growing population of Canada geese nesting in Wisconsin. The average Canada goose hunting season structure reflected this good production year while maintaining control of the harvest within the allowed quota.

METHODS

The Wisconsin Department of Natural Resources collects Canada goose harvest data via 2 different methods in the 3 Canada goose management zones. In the statewide Early September season and in the Exterior zone during the regular season all Canada goose hunters are required to report their harvest using the 1-800-99-GOOSE telephone call-in system within 48 hours. With this system hunters report the following information: DNR customer number, month of harvest, day of harvest, number of geese harvested, and county of harvest. This information is electronically recorded and summarized in a harvest database that is reviewed at least weekly during the season to track harvest levels. Department law enforcement personnel around the state conduct field checks of Canada goose hunters to assure compliance with the recording system. Results of these filed checks provide a compliance rate that is used to adjust the harvest records to estimate total Canada goose harvest.

Horicon/Collins Mail Survey

Canada goose hunters in the Horicon and Collins zones were mailed a hunter questionnaire to obtain harvest information. The questionnaire was sent to 100% of permit holders for the Collins Zone and about 52% of the Horicon Zone permit holders. The questionnaire was mailed to hunters at the end of each time period. The hunters were selected randomly in proportion to the number of hunters in each time period. Response rates for questionnaires (Table 1) for the Collins Zone stayed about the same in 2005 when compared to 2004 (74.6% and 74.2%, respectively), and the 2005 response rates for the Horicon Zone increased when compared to the 2004 response rate (58.6% and 54.6%, respectively).

RESULTS AND DISCUSSION

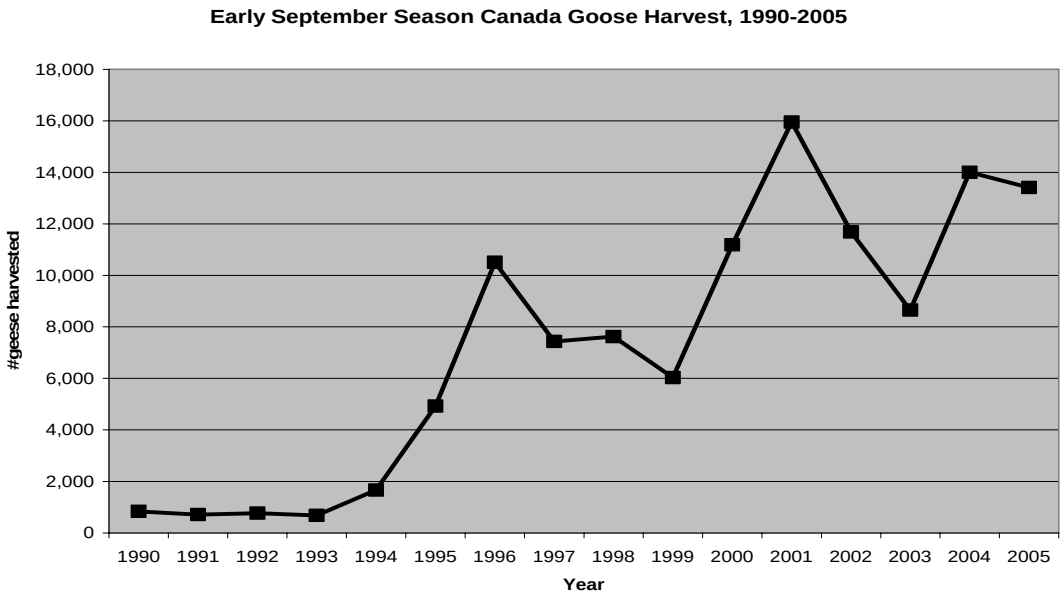
Early September Canada Goose Season Hunter Participation and Harvest

The Early September season is an important part of Wisconsin's Canada goose management program. This season offers hunters an additional recreational experience outside of the regular season and helps to target harvest on our resident Giant Canada geese. The breeding population for our resident geese has had a fairly consistent increasing trend and in some areas these increased goose numbers have resulted in nuisance problems.

The number of applicants for the Early September Canada Goose permit was down from the last couple of years. This is most likely a result of a decline in Conservation Patron permit holders

(resulting from the increased cost of this license) rather than a reflection of a decrease in the number of hunters with the intent to hunt this early season. We have no data to assess the percent of the total applicants that actively hunt during this period. Conservation Patron license customers are offered an Early September Canada goose permit as part of the combined license package so some of these permit holders may have had little intent to hunt during this season even though they had a permit. The harvest figures for 2005 suggest that participation was likely similar to recent years.

At an estimated 13,410, the 2005 early season Canada goose harvest was the 3rd highest harvest on record for this season. Eight of the 10 counties with the highest early season harvest were among the top 10 harvest counties in the previous 2 years ('03 and '04). Marathon and Washburn counties are new counties in the top 10 list. This list indicates that the opportunity and need for this early season is distributed across the state. It also suggests that we are successfully targeting different geese and different hunter interest than in the regular season. Counties like Polk, Barron, Washburn and Marathon are in the top 10 early season harvest counties but rank much lower during the regular season.



Top 10 counties - Early season harvest - 2005			
County	Rank	Estimated Kill	Percent of Early Total
Polk	1	814	6.10%
Brown	2	758	5.70%
Barron	3	680	5.10%
Door	4	589	4.40%
Manitowoc	5	567	4.20%
Sheboygan	6	451	3.40%
Dane	7	422	3.10%
Marathon	8	373	2.80%
Washburn	9	367	2.70%
Jefferson	10	319	2.40%

Regular Season Hunter Participation and Characteristics

In 2005 106,451 individuals received a Wisconsin Canada goose regular season hunting permit. This was a decline of 3,507 or 3.2% from 2004. A second year of increased cost of the Conservation Patron license may have been the primary cause of this decline which would suggest that this is not a real decline in active Canada goose hunters. As part of the combined license package, a Conservation Patron holder is offered an Exterior Zone Canada goose permit as part of the total license fee. The number of Exterior Zone permit holders declined by 2,804 which represents most of the overall decrease in permits.

Permit Issuance
Exterior Zone
2005 = 86,760
2004 = 89,564
2003 = 92,011
2002 = 89,186
2001 = 82,091
2000 = 84,686
1999 = 77,921
1998 = 52,832
1997 = 54,404
1996 = 51,069
1995 = 53,104
1994 = 44,108
1993 = 30,854
1992 = 27,332
1991 = 40,094
1990 = 40,197
1989 = 33,331
1988 = 24,052

Exterior Zone

Exterior Zone permits totaled 86,760 in 2005. This represents 82% of the total regular season permits which is similar to recent years. However, we have no estimate of how many were actively hunting geese. Estimates of the number of active Wisconsin goose hunters derived from USFWS HIP estimates for 2005 will not be available until July 2006, however, previous comparisons of state and federal hunter estimates suggest that about 50% of the Exterior zone permit holders are active goose hunters. This would indicate about 43,000 of the Exterior zone permit holders were actively hunting geese. This does not include those who had purchased a permit earlier in the year with the intent to hunt geese but decided not to hunt when fall arrived.

The 5 counties with the highest total Exterior Zone goose permits had nearly the identical proportions of the statewide total permits as compared to the 2 previous years (Table 3). In order, the counties with the highest number of permits issued were Waukesha, Dane, Outagamie, Milwaukee and Winnebago. Three of these counties also have the 3 highest totals for overall human population in the state, however, Outagamie and Winnebago counties seem to have a higher proportion of goose hunters in relation to population size.

Permit Issuance
Horicon Zone
2005 = 19,236
2004 = 19,937
2003 = 20,211
2002 = 21,268
2001 = 23,697
2000 = 24,656
1999 = 25,635
1998 = 27,356
1997 = 34,439
1996 = 35,707
1995 = 38,045
1994 = 39,062
1993 = 32,248
1992 = 35,387
1991 = 50,373
1990 = 47,980
1989 = 40,180
1988 = 32,500

Horicon Zone

The Horicon Zone is a large area that includes all of Green Lake and parts of Dodge, Columbia, Fond du Lac, Marquette, Washington and Winnebago counties. Horicon zone permit holders receive a certain number of harvest tags (1-6) each year depending upon the Canada goose population size. There has been a gradual slow decline in the number of Horicon Zone permits over the last 18 years which continued in 2005. The total number of Horicon permits issued in 2005 was 19,236 which was 701 permits fewer than 2004. However, the percentage of total hunters represented by the Horicon permits remained similar to previous years at 18% (Table 2). The percentage of

active Horicon zone hunters (those who actually hunted) from all time periods combined declined from 72% in 2004 to 67% in 2005. This is somewhat surprising since the number of tags issued went up from 3 in 2004 to 4 in 2005. It is interesting that the mean number of trips taken by active hunters in this zone was the same or higher for all periods except Horicon 4 as compared to 2004 (Table 7). Apparently, there was some factor other than harvest opportunity that discouraged some permit holders from hunting.

Horicon zone hunters are primarily hunters that have previous experience in this zone. In 2005, 94.5% of the Horicon zone hunters had hunted the Horicon zone in previous years. This high proportion of repeat hunters is consistent with previous years. The Horicon time periods are intended to distribute hunter harvest pressure across the fall season. In 2005, hunter preference for time periods was similar to previous years with periods 2 and 3 having the most interest and period 4 having the least (Table 2).

About ½ of the Horicon zone hunters are hunting on private land (Table 17). About 1/3 of the Horicon zone permit holders hunt from blinds in the Horicon Intensive Management Subzone and continue to provide a significant contribution to the local economy in blind fees alone (Table 19).

In addition, many Horicon Zone goose hunters were specifically goose hunters and did not hunt both ducks and geese (Table 6). This characteristic is similar to previous years. In 2005, 33.4% (6,425) of the Horicon hunters did not hunt ducks that year and 40.6% (7,810) did not hunt ducks in 2004.

Collins Zone

The Collins Zone is a very small zone surrounding the Collins Wildlife Management Area. The number of applicants for the Collins zone remains very small compared to the statewide number of Canada goose hunters (Table 2). A total of 455 Collins zone permits were issued in 2005. As with the Horicon Zone hunters, these hunters are mostly (83.4%, Table 4) returning to this zone from previous years and most hunted geese the last 2 years (86.4%, Table 5). While the number of permits awarded in the Collins zone has shown a decreasing trend over the last 18 years, the percentage of those actively hunting in 2005 was still high at 80% (Table 2). Hunters continued the pattern of previous years of preferring time period 2. In 2005, 36.7% of the Collins hunters did not hunt ducks that year and 43% did not hunt ducks in 2004.

Permit Issuance
Collins Zone

2005 =	**455**
2004 =	**457**
2003 =	**494**
2002 =	**475**
2001 =	**615**
2000 =	**583**
1999 =	**662**
1998 =	**699**
1997 =	**845**
1996 =	**839**
1995 =	**950**
1994 =	**887**
1993 =	**724**
1992 =	**781**
1991 =	**969**
1990 =	**1,197**
1989 =	**1,303**
1988 =	**975**

Regular Season Harvest

Statewide

The statewide regular season Canada goose harvest in 2005 was 47,603. Production of MVP geese in 2005 was good after a very poor year in 2004. The flyway MVP management plan, however, requires a very high breeding population survey the year following a poor production year like 2004 in order to raise the flyway-wide quota. Wisconsin's harvest quota did however, increase in 2005 from 2004 because of our shifting harvest derivation between MVP geese and resident giant Canada geese. Our statewide harvest figures suggest that our season structure continues to effectively manage harvest consistent with annual changes in production. The overall harvest level in 2005 was 76% of the quota (62,500) which is less than recent years (86% in 2003, 82% in 2004).

When combining the harvest from all zones by county the top 10 harvest counties in 2005 were:

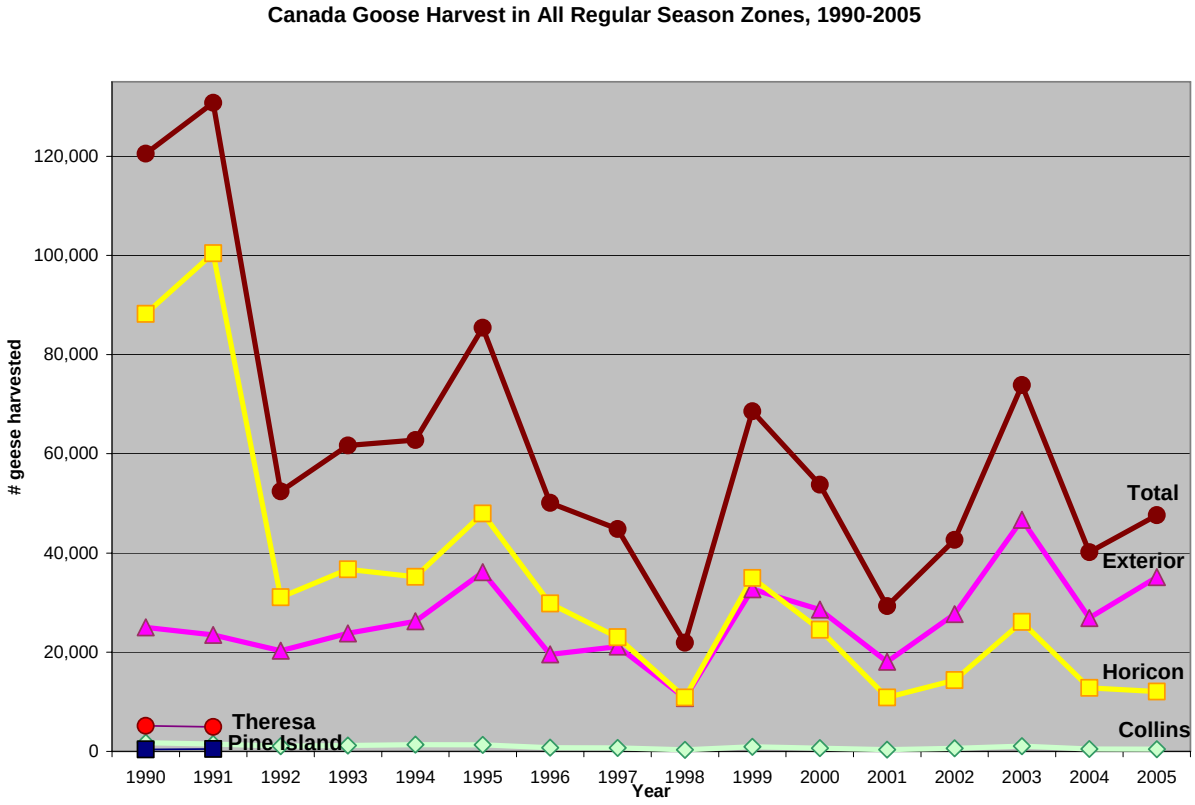
Top 10 counties - Statewide harvest for 2005 (all zones-Regular season)

County	Rank	Estimated Kill	Percent of Statewide Total
Dodge	1	6,981	14.66%
Brown	2	2,675	5.62%
Fond du Lac	3	2,550	5.36%
Manitowoc	4	2,336	4.91%
Green Lake	5	1,782	3.74%
Dane	6	1,670	3.51%
Waukesha	7	1,642	3.45%
Outagamie	8	1,457	3.06%
Sheboygan	9	1,403	2.95%
Racine	10	1,317	2.77%

This county level distribution illustrates continued concentration of geese and goose harvest in those areas associated with the Horicon (Dodge, Green Lake, and Fond du Lac) and Collins (Manitowoc) zones. However, Brown County harvest exceeded Fond du Lac County harvest slightly in 2005 which is a change from recent years. This is consistent with the decreased hunting activity by Horicon zone permit holders in 2005. Overall, none of the top 10 harvest counties were a surprise since they had all been in the top 10 in at least one of the last 2 years.

Exterior

The Exterior zone represents all areas of the state open to goose hunting outside of the Horicon and Collins zones. The total Exterior zone harvest was 35,126 in 2005 which was 74% of the statewide harvest (Table 9). This proportion of the statewide total was higher than recent years (67% in 2004, 63% in 2003). The actual harvest was the 3rd highest since 1990. The total Exterior harvest in 2005 was 86% of the quota for that zone.

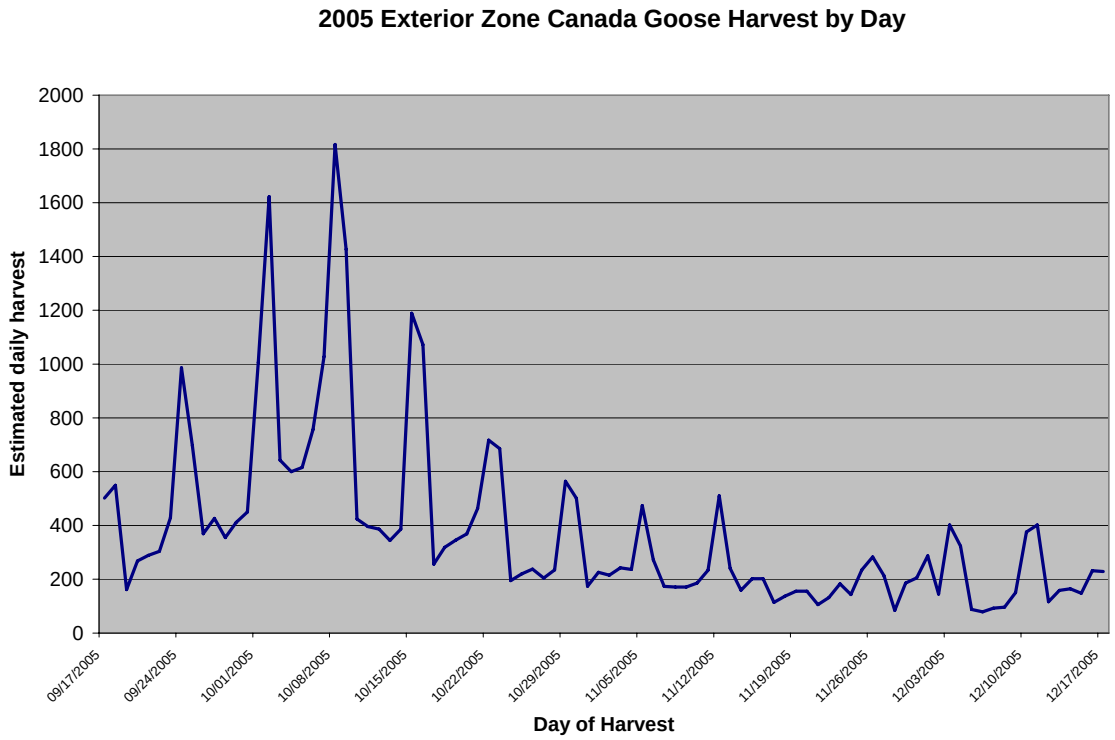


The list of the top 10 harvest counties is very similar to recent years. This group of counties represents the southeastern one third of the state excluding those areas in the Horicon and Collins management zones. These counties also overlap with several of the counties with the highest human populations, which suggests that we are successful in taking advantage of some of the harvest potential in areas where high goose numbers have greater potential to create nuisance problems.

Top 10 counties - Exterior harvest - 2005

County	Rank	Estimated Kill	Percent of Exterior Total
Brown	1	2,675	7.60%
Manitowoc	2	1,884	5.40%
Dane	3	1,670	4.80%
Waukesha	4	1,642	4.70%
Outagamie	5	1,457	4.10%
Sheboygan	6	1,403	4.00%
Racine	7	1,317	3.70%
Kenosha	8	1,159	3.30%
Walworth	9	1,112	3.20%
Ozaukee	10	1,036	2.90%

Harvest of Canada geese continues to be highest on weekends and most of the Exterior zone harvest occurs in late September and October (Table 12). Daily and weekly harvest levels drop off considerably during November and December. Canada goose harvest is particularly low during the regular deer gun hunting season at the end of November and increases slightly followed that period. In 2005, 9,263 (11%) hunters harvested at least one goose out of 86,760 Exterior zone permit holders (Table 16). This proportion is similar to recent years (12% in '03, 10% in '04). While this figure may seem low we have no measure of how many of these permit holders actively hunted geese because Conservation Permit holders can automatically obtain this permit. Fifty-four percent of the successful hunters harvested only 1 goose and 21% harvested 2 geese. This is almost identical to the 2004 success.



Horicon Zone

The total harvest for the Horicon Zone was 12,025 in 2005 which was 26% of the statewide harvest (Table 9). The actual harvest was similar to 2004 (12,769) but was a smaller proportion of the statewide harvest. This decline appears to be the result of decreased hunting participation by people who held a Horicon permit. The overall number of Horicon zone permit holders continued a slow decline in 2005 as did participation and success rate in all periods except Horicon 1 (Tables 2 and 14). The total Horicon Zone harvest was only 57% of the quota for that zone. The areas directly adjacent to the Horicon National Wildlife Refuge and Wildlife Management Areas (portions of Dodge and Fond du lac Counties) continue to represent about 75% of the Horicon Zone harvest. As in previous years, the highest harvest occurred in time period 2, followed by time period 3. It is possible that decline in participation in the Horicon

zone could have been the result of the moderate expectations on Canada goose numbers as communicated by the Department and the media prior to the season.

Collins zone

The Collins zone is a relatively small harvest management zone that represents an area with high harvest potential. Manitowoc County is the 4th highest in Canada goose harvest when combining the harvest from all zones, and Collins is a key goose concentration area in that county. The total harvest for the Collins zone was 452 in 2005 which was 57% of the quota for that zone (Table 9). While small, the Collins zone represents an area of consistently high hunter success compared to other areas of the state (Tables 14 and 15).

MANAGEMENT IMPLICATIONS

In the past, Wisconsin was largely dependent upon the MVP population for goose harvest opportunities. This has continued to change as the Giant Canada goose population in Wisconsin and the region has grown. The Wisconsin harvest derivation published in 2005 showed that the 2002-2004 3 year average harvest contained 48% MVP and 49% Giant Canada geese. With approximately half of the Canada goose harvest from MVP geese that population is very important to Wisconsin. This proportion of harvest makes Wisconsin unique among states in the Mississippi Flyway where resident Giant Canada geese harvest makes up much more of the annual harvest of most other states. In order to properly manage the MVP and meet USFWS requirements, Wisconsin has to be able to adjust our annual Canada goose harvest in relation to the annual changes in MVP production. Based on the annual changes in harvest tracking with the changes in harvest quota, we appear to be effectively managing our harvest. The potential for a large Canada goose harvest continues to exist in the area around the Horicon marsh indicating a continued need for special harvest management in this zone. However, there was a significant drop in Horicon zone participation in 2005 which is something that should be watched and continually evaluated.

The annual changes in Canada goose breeding populations of MVP and Wisconsin Giants illustrate the need for continued breeding surveys, banding and harvest monitoring in order to effectively manage Canada geese in Wisconsin. Both breeding, fall distribution and harvest of Canada geese in Wisconsin is a constantly changing picture. Each year the information collected on Canada geese in Wisconsin is used to evaluate and adjust our harvest quotas, season structure and banding efforts. Based on these data, we made significant changes in our banding distribution and effort in 2004 in order to better sample the harvest population of geese in Wisconsin. These data will provide us the necessary information to document the changes in distribution and population of our resident Giant breeders in relation to the MVP. This information will allow us to make the necessary adjustments to management and harvest of Canada geese in Wisconsin.

Agricultural crop damage from Canada geese continues to be a concern for farmers in Wisconsin in the Horicon area and other locations where Canada geese concentrate. The continued

evaluation of harvest and damage has allowed the state to adjust our quota levels and seasons structure to aid in controlling crop damage. Based on declines in agricultural damage complaints and damage claims in recent years it appears that our management of harvest is helping these issues. Wisconsin continues to offer agricultural harvest tags in order to assist specific farmers with documented goose damage. In 2005, approximately 130 geese were harvested under these special permits. Consideration of agricultural damage issues in the management of Wisconsin's Canada geese populations is important in our overall management approach.

Similarly, considering Canada goose problems in urban areas is part of the overall management of Canada geese in Wisconsin. Our resident breeders have shown a generally increasing population trend since we began monitoring this population in 1986. Much of this increase has been in more suburban and urban counties, however, resident breeders continue to increase in distribution across the state. As we monitor breeding populations and harvest we can evaluate our effectiveness at using recreational harvest to assist in managing these more urban problems from concentrations of Canada geese.

CITATIONS

Canada Goose Management Plan for East Central Wisconsin 1980-1990.

Leafloor, J.O., K. F. Abraham, F. D. Caswell, K. E. Gamble, R. N. Helm, D. D. Humburg, J. S. Lawerence, D. R. Luukkonen, R. D. Pritchert, E. L. Warr, G. G. Zenner. 2003. Canada goose management in the Mississippi Flyway. Pages 22-36 in T. J. Moser, R. D. Lien, K. C. VerCauteren, K. F. Abraham, D. E. Andersen, J. G. Bruggink, J. M. Coluccy, D. A. Graber, J. O. Leafloor, D. R. Luukkonen, R. E. Trost, editors. Proceedings of the 2003 International Canada Goose Symposium, Madison, WI. USA.

Miller, S.W. 1998. The biopolitics of Mississippi Valley Population Canada geese management: the Wisconsin perspective. Pages 467-474 in D.H. Rusch, M. D. Samuel, D. D. Humburg, and B. D. Sullivan, editors. Biology and management of Canada geese. Proceedings of the international Canada Goose Symposium, Milwaukee, Wisconsin, USA.

Walton, L. and J. Hughes June 2005. Preliminary Spring Survey Results for MVP Canada geese 2005. Ontario Ministry of Natural Resources

Table 1. *Number of surveys mailed, returned, and response rate for the 2005 Canada goose season.*

Zone and Period	# Mailed	# Returned	Percent Response
Horicon 1	1,282	671	52.3%
Horicon 2	3,354	1,944	58.0%
Horicon 3	3,308	1,941	58.7%
Horicon 4	2,058	1,303	63.3%
Collins 1	92	54	58.7%
Collins 2	290	226	77.9%
Collins 3	76	60	78.9%
Total	**10,460**	**6,199**	**59.3%**

Table 2. *Permits issued, active hunters, percent active, and number of successful hunters by zone and time period. Active and successful hunters derived from questionnaire data. Percent successful applies to active permit holders, except for Exterior Zone where it applies to all permit holders.*

Zone and Period	Permits Issued (hunters)	Active Hunters	% Active	# Successful	% Successful
Horicon 1	2,764	1,791	64.8%	869	48.5%
Horicon 2	7,248	5,110	70.5%	2,238	43.8%
Horicon 3	7,159	4,847	67.7%	1,876	38.7%
Horicon 4	2,065	1,076	52.1%	500	46.5%
Collins 1	93	72	76.9%	46	65.0%
Collins 2	288	235	81.5%	121	51.4%
Collins 3	74	58	78.0%	30	52.2%
Exterior	86,760			9,263	10.7%
Total	**106,451**			**14,943**	**14.0%**

Table 3. *Number of goose permit applicants by zone and county of residence. (Continued on next page).*

	Horicon		Collins		Exterior	
County	Frequency	Percent	Frequency	Percent	Frequency	Percent
Adams	30	0.2%	1	0.2%	238	0.3%
Ashland	2	0.0%	1	0.2%	311	0.3%
Barron	6	0.0%			1,392	1.6%
Bayfield	4	0.0%			273	0.3%
Brown	104	0.5%	33	7.3%	3,056	3.4%
Buffalo	35	0.2%			468	0.5%
Burnett	2	0.0%			626	0.7%
Calumet	24	0.1%	41	9.0%	689	0.8%
Chippewa	28	0.1%			1,073	1.2%
Clark	12	0.1%	1	0.2%	452	0.5%
Columbia	814	4.1%	4	0.9%	1,421	1.6%
Crawford	90	0.5%			408	0.5%
Dane	1,125	5.6%	3	0.7%	5,210	5.8%
Dodge	1,788	8.9%			486	0.5%
Door	7	0.0%			801	0.9%
Douglas					676	0.8%
Dunn	36	0.2%			684	0.8%
Eau Claire	115	0.6%	2	0.4%	1,291	1.4%
Florence	4	0.0%			77	0.1%
Fond Du Lac	1,845	9.2%	1	0.2%	997	1.1%
Forest	11	0.1%			237	0.3%
Grant	280	1.4%	1	0.2%	575	0.6%
Green	111	0.6%	1	0.2%	692	0.8%
Green Lake	734	3.7%			247	0.3%
Iowa	89	0.4%			367	0.4%
Iron	7	0.0%			126	0.1%
Jackson	20	0.1%			319	0.4%
Jefferson	311	1.6%			2,309	2.6%
Juneau	54	0.3%			718	0.8%
Kenosha	152	0.8%			1,268	1.4%
Kewaunee			4	0.9%	728	0.8%
La Crosse	369	1.8%	2	0.4%	2,136	2.4%
Lafayette	50	0.3%			248	0.3%
Langlade	29	0.1%			356	0.4%
Lincoln	137	0.7%			733	0.8%
Manitowoc	33	0.2%	68	14.9%	2,076	2.3%
Marathon	264	1.3%	6	1.3%	1,813	2.0%
Marinette	32	0.2%	1	0.2%	1,052	1.2%
Marquette	154	0.8%			710	0.8%
Menominee		0.0%			8	0.0%
Milwaukee	1,701	8.5%	5	1.1%	3,153	3.5%
Monroe	55	0.3%	1	0.2%	718	0.8%
Oconto	18	0.1%	2	0.4%	926	1.0%
Oneida	125	0.6%	2	0.4%	1,023	1.1%

	Horicon		Collins		Exterior	
County	Frequency	Percent	Frequency	Percent	Frequency	Percent
Outagamie	442	2.2%	101	22.2%	3,714	4.1%
Ozaukee	268	1.3%	6	1.3%	1,414	1.6%
Pepin	13	0.1%			209	0.2%
Pierce	23	0.1%			908	1.0%
Polk	5	0.0%			1,557	1.7%
Portage	202	1.0%	2	0.4%	1,454	1.6%
Price	34	0.2%			375	0.4%
Racine	199	1.0%	12	2.6%	2,853	3.2%
Richland	37	0.2%			199	0.2%
Rock	428	2.1%			2,419	2.7%
Rusk	4	0.0%			313	0.3%
St. Croix	21	0.1%	1	0.2%	1,852	2.1%
Sauk	251	1.3%			1,191	1.3%
Sawyer	8	0.0%			426	0.5%
Shawano	56	0.3%	4	0.9%	877	1.0%
Sheboygan	212	1.1%	61	13.4%	2,524	2.8%
Taylor	8	0.0%			381	0.4%
Trempealeau	71	0.4%			743	0.8%
Vernon	139	0.7%			479	0.5%
Vilas	66	0.3%	1	0.2%	458	0.5%
Walworth	123	0.6%	1	0.2%	1,716	1.9%
Washburn	4	0.0%			694	0.8%
Washington	1,029	5.1%	1	0.2%	1,983	2.2%
Waukesha	1,747	8.7%	5	1.1%	5,345	6.0%
Waupaca	135	0.7%	11	2.4%	1,479	1.7%
Waushara	77	0.4%	1	0.2%	633	0.7%
Winnebago	1,018	5.1%	56	12.3%	3,107	3.5%
Wood	222	1.1%			2,070	2.3%
Unknown	843	4.2%			2,492	2.8%
Non. Resident	1,507	7.5%	12	2.6%	2,532	2.8%

Table 4. *Goose hunting in past zones.*

Current Zone	Past Collins	Past Horicon	Past Exterior
Collins	83.4%	5.2%	11.4%
Horicon	0.1%	94.5%	5.3%

Table 5. *Percent hunting geese in 2005 that also hunted in 2004.*

Zone	% That Hunted in 2005
Collins	86.4%
Horicon	85.4%

Table 6. *Past and present duck hunting by goose permit.*

Zone	Duck Hunted in 2004	Duck Hunted in 2005
Collins	57.0%	63.3%
Horicon	59.4%	66.6%

Table 7. *Mean number of hunting trips by zone and time period. Applies to active permit holders only.*

Zone/Period	Mean # of Trips	Maximum # of Trips
Collins 1	4.9	12
Collins 2	4.6	18
Collins 3	5.7	18
Horicon 1	3.3	30
Horicon 2	3.7	30
Horicon 3	3.8	34
Horicon 4	3.1	40

Table 8. *Harvest by zone and time period. The estimated harvest was derived from questionnaire data in the Collins and Horicon zones. Reported harvest in the Exterior Zone is from mandatory reporting. The reported harvest for the Exterior zone was adjusted by an overall compliance rate of 80.5% to obtain the estimated harvest.*

Zone/Period	Estimated Harvest	Reported Harvest
Collins 1	131	
Collins 2	256	
Collins 3	65	
Horicon 1	2,060	
Horicon 2	4,905	
Horicon 3	3,780	
Horicon 4	1,280	
Exterior	35,126	28,282
Total	**47,604**	

Table 9. *Flyway allocation and estimated harvest by zone.*

Zone	Allocation	Harvest	% of Allocation
Collins	800	452	56.5%
Horicon	21,000	12,026	57.3%
Exterior	40,700	35,126	86.3%
Total	62,500	47,604	76.2%

Table 10. *Exterior zone goose harvest by county (continued on next page).*

County	Reported Harvest	Expanded Harvest	Percent
Adams	257	319	0.9%
Ashland	61	76	0.2%
Barron	593	737	2.1%
Bayfield	81	101	0.3%
Brown	2,154	2,675	7.6%
Buffalo	443	550	1.6%
Burnett	410	509	1.4%
Calumet	342	425	1.2%
Chippewa	526	653	1.9%
Clark	134	166	0.5%
Columbia	248	308	0.9%
Crawford	205	255	0.7%
Dane	1,345	1,670	4.8%
Dodge	148	184	0.5%
Door	700	869	2.5%
Douglas	198	246	0.7%
Dunn	70	87	0.2%
Eau Claire	72	89	0.3%
Florence	35	43	0.1%
Fond du Lac	308	383	1.1%
Forest	30	37	0.1%
Grant	87	108	0.3%
Green	94	117	0.3%
Iowa	87	108	0.3%
Iron	92	114	0.3%
Jackson	50	62	0.2%
Jefferson	593	737	2.1%
Juneau	244	303	0.9%
Kenosha	933	1,159	3.3%
Kewaunee	814	1,011	2.9%
La Crosse	355	441	1.3%
Langlade	75	93	0.3%
Lafayette	19	24	0.1%
Lincoln	90	112	0.3%
Manitowoc	1,517	1,884	5.4%
Marathon	505	627	1.8%
Marinette	292	363	1.0%
Marquette	431	535	1.5%
Menominee	1	1	0.0%
Milwaukee	8	10	0.0%
Monroe	208	258	0.7%
Oconto	376	467	1.3%
Oneida	83	103	0.3%
Outagamie	1,173	1,457	4.1%
Ozaukee	834	1,036	2.9%
Pepin	20	25	0.1%

County	Reported Harvest	Expanded Harvest	Percent
Pierce	98	122	0.3%
Polk	755	938	2.7%
Portage	199	247	0.7%
Price	66	82	0.2%
Racine	1,060	1,317	3.7%
Richland	48	60	0.2%
Rock	760	944	2.7%
Rusk	121	150	0.4%
St. Croix	488	606	1.7%
Sauk	134	166	0.5%
Sawyer	184	229	0.7%
Shawano	199	247	0.7%
Sheboygan	1,130	1,403	4.0%
Taylor	146	181	0.5%
Trempealeau	189	235	0.7%
Vernon	128	159	0.5%
Vilas	63	78	0.2%
Walworth	895	1,112	3.2%
Washburn	256	318	0.9%
Washington	722	897	2.6%
Waukesha	1,322	1,642	4.7%
Waupaca	533	662	1.9%
Waushara	196	243	0.7%
Winnebago	784	974	2.8%
Wood	462	574	1.6%
Unknown	3	4	0.0%
Total	**28,282**	**35,126**	

Table 11. *Horicon Zone goose harvest by county. The estimated harvest was derived from questionnaire data.*

County	Total Estimated Harvest	% of Harvest
Columbia	327	2.7%
Dodge	6,797	56.5%
Fond du lac	2,167	18.0%
Green Lake	1,782	14.8%
Marquette	471	3.9%
Washington	302	2.5%
Winnebago	180	1.5%
Total	**12,026**	

Table 12. *Exterior zone goose harvest by date. Bold numbers indicate weekends (continued on the next page).*

Date Of Kill	Report Harvest	Expanded	Cumulative Harvest	Cumulative Percent
17-Sep-2005	**404**	**502**	**502**	**1.4%**
18-Sep-2005	**442**	**549**	**1,051**	**3.0%**
19-Sep-2005	130	161	1,212	3.5%
20-Sep-2005	216	268	1,480	4.2%
21-Sep-2005	233	289	1,770	5.0%
22-Sep-2005	245	304	2,074	5.9%
23-Sep-2005	345	428	2,503	7.1%
24-Sep-2005	**794**	**986**	**3,489**	**9.9%**
25-Sep-2005	**561**	**697**	**4,186**	**11.9%**
26-Sep-2005	297	369	4,554	13.0%
27-Sep-2005	343	426	4,980	14.2%
28-Sep-2005	286	355	5,336	15.2%
29-Sep-2005	331	411	5,747	16.4%
30-Sep-2005	362	450	6,196	17.6%
1-Oct-2005	**810**	**1,006**	**7,202**	**20.5%**
2-Oct-2005	**1,307**	**1,623**	**8,826**	**25.1%**
3-Oct-2005	518	643	9,469	27.0%
4-Oct-2005	483	600	10,069	28.7%
5-Oct-2005	495	615	10,684	30.4%
6-Oct-2005	609	756	11,440	32.6%
7-Oct-2005	828	1,028	12,468	35.5%
8-Oct-2005	**1,462**	**1,816**	**14,284**	**40.7%**
9-Oct-2005	**1,149**	**1,427**	**15,711**	**44.7%**
10-Oct-2005	341	424	16,135	45.9%
11-Oct-2005	319	396	16,531	47.1%
12-Oct-2005	311	386	16,917	48.2%
13-Oct-2005	277	344	17,261	49.1%
14-Oct-2005	311	386	17,648	50.2%
15-Oct-2005	**957**	**1,189**	**18,836**	**53.6%**
16-Oct-2005	**863**	**1,072**	**19,908**	**56.7%**
17-Oct-2005	206	256	20,164	57.4%
18-Oct-2005	257	319	20,483	58.3%
19-Oct-2005	278	345	20,828	59.3%
20-Oct-2005	296	368	21,196	60.3%
21-Oct-2005	373	463	21,659	61.7%
22-Oct-2005	**577**	**717**	**22,376**	**63.7%**
23-Oct-2005	**552**	**686**	**23,061**	**65.7%**
24-Oct-2005	157	195	23,256	66.2%
25-Oct-2005	177	220	23,476	66.8%
26-Oct-2005	192	238	23,715	67.5%
27-Oct-2005	164	204	23,918	68.1%
28-Oct-2005	189	235	24,153	68.8%
29-Oct-2005	**454**	**564**	**24,717**	**70.4%**
30-Oct-2005	**403**	**501**	**25,218**	**71.8%**
31-Oct-2005	140	174	25,391	72.3%
1-Nov-2005	182	226	25,617	72.9%
2-Nov-2005	173	215	25,832	73.5%

Date Of Kill	Report Harvest	Expanded	Cumulative Harvest	Cumulative Percent
3-Nov-2005	195	242	26,075	74.2%
4-Nov-2005	190	236	26,311	74.9%
5-Nov-2005	**382**	**474**	**26,785**	**76.3%**
6-Nov-2005	**219**	**272**	**27,057**	**77.0%**
7-Nov-2005	139	173	27,230	77.5%
8-Nov-2005	138	171	27,401	78.0%
9-Nov-2005	138	171	27,572	78.5%
10-Nov-2005	150	186	27,759	79.0%
11-Nov-2005	188	233	27,992	79.7%
12-Nov-2005	**411**	**510**	**28,503**	**81.1%**
13-Nov-2005	**194**	**241**	**28,744**	**81.8%**
14-Nov-2005	128	159	28,903	82.3%
15-Nov-2005	163	202	29,105	82.9%
16-Nov-2005	163	202	29,307	83.4%
17-Nov-2005	92	114	29,422	83.8%
18-Nov-2005	110	137	29,558	84.1%
19-Nov-2005	**125**	**155**	**29,714**	**84.6%**
20-Nov-2005	**125**	**155**	**29,869**	**85.0%**
21-Nov-2005	85	106	29,974	85.3%
22-Nov-2005	106	132	30,106	85.7%
23-Nov-2005	147	183	30,289	86.2%
24-Nov-2005	115	143	30,431	86.6%
25-Nov-2005	189	235	30,666	87.3%
26-Nov-2005	**228**	**283**	**30,949**	**88.1%**
27-Nov-2005	**172**	**214**	**31,163**	**88.7%**
28-Nov-2005	68	84	31,247	89.0%
29-Nov-2005	150	186	31,434	89.5%
30-Nov-2005	165	205	31,639	90.1%
1-Dec-2005	231	287	31,926	90.9%
2-Dec-2005	117	145	32,071	91.3%
3-Dec-2005	**324**	**402**	**32,473**	**92.4%**
4-Dec-2005	**260**	**323**	**32,796**	**93.4%**
5-Dec-2005	71	88	32,884	93.6%
6-Dec-2005	64	79	32,964	93.8%
7-Dec-2005	74	92	33,056	94.1%
8-Dec-2005	77	96	33,151	94.4%
9-Dec-2005	121	150	33,302	94.8%
10-Dec-2005	**303**	**376**	**33,678**	**95.9%**
11-Dec-2005	**324**	**402**	**34,080**	**97.0%**
12-Dec-2005	93	116	34,196	97.4%
13-Dec-2005	127	158	34,354	97.8%
14-Dec-2005	132	164	34,518	98.3%
15-Dec-2005	119	148	34,665	98.7%
16-Dec-2005	187	232	34,898	99.4%
17-Dec-2005	**184**	**229**	**35,126**	**100.0%**
Total	**28,282**	**35,126**		

Table 13. *Weekday of reported kill in percent. Data from mandatory reporting in the Exterior zone and questionnaires in the other zones.*

Zone/ Period	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Collins 1	23.5%	7.8%	9.8%	9.8%	5.9%	17.7%	25.5%
Collins 2	19.9%	14.3%	12.4%	9.9%	9.9%	10.6%	23.0%
Collins 3	21.4%	11.9%	14.3%	11.9%	7.1%	11.9%	21.4%
Collins Total	**20.9%**	**12.6%**	**12.2%**	**10.2%**	**8.7%**	**12.2%**	**23.2%**
Horicon 1	23.7%	7.3%	9.4%	4.1%	10.5%	12.9%	32.2%
Horicon 2	18.9%	12.3%	8.9%	8.0%	7.1%	12.1%	32.6%
Horicon 3	16.9%	7.9%	11.0%	10.2%	11.2%	13.4%	29.4%
Horicon 4	17.7%	8.9%	7.0%	7.0%	12.9%	16.0%	30.4%
Horicon Total	**18.7%**	**9.7%**	**9.2%**	**8.0%**	**9.9%**	**13.4%**	**31.2%**
Exterior	24.2%	8.3%	9.5%	9.5%	10.0%	12.2%	26.2%
All Zones	**23.6%**	**8.5%**	**9.5%**	**9.4%**	**10.0%**	**12.3%**	**26.7%**

Table 14. *Percent success by active permit for the Horicon and Collins zone. Harvest figures were derived from questionnaire data.*

Zone/Period	1st Permit	2nd Permit	3rd Permit	4th Permit
Collins 1	60.0%	37.5%	32.5%	25.0%
Collins 2	50.3%	29.2%	17.8%	9.2%
Collins 3	51.1%	38.3%	17.0%	4.3%
Horicon 1	47.5%	31.5%	18.7%	14.6%
Horicon 2	43.3%	27.5%	13.8%	8.0%
Horicon 3	37.8%	22.2%	10.1%	5.4%
Horicon 4	45.9%	33.5%	21.8%	15.2%

Table 15. *Number of birds harvested per permit holder and active permit holder by zone. Hunter numbers derived from applications, questionnaires and 1-800 registration.*

Zone	Birds/Permit Holder	Birds/Active Permit Holder
Collins	1.01	1.24
Horicon	0.63	0.94
Exterior	0.40	N/A

Table 16. *Exterior Zone season bag derived from mandatory reporting data.*

Bag	Hunters	Percent
0	77497	89.3%
1	3906	4.5%
2	2235	2.6%
3	926	1.1%
4	699	0.8%
5	346	0.4%
6	267	0.3%
7	163	0.2%
8	141	0.2%
9	108	0.1%
10	83	0.1%
11	73	0.1%
12	40	0.0%
13	43	0.0%
14	47	0.1%
15	24	0.0%
16	19	0.0%
17	20	0.0%
18	21	0.0%
19	16	0.0%
20	8	0.0%
21	8	0.0%
22	11	0.0%
23	1	0.0%
24	4	0.0%
25	7	0.0%
26	3	0.0%
27	5	0.0%
28	4	0.0%
29	2	0.0%
30	4	0.0%
31	1	0.0%
32	4	0.0%
33	3	0.0%
34	2	0.0%
35	2	0.0%
39	1	0.0%
41	3	0.0%
42	1	0.0%
44	1	0.0%
45	1	0.0%
48	1	0.0%
61	1	0.0%
64	1	0.0%
65	2	0.0%
71	1	0.0%
75	3	0.0%
88	1	0.0%

Table 17. *Percent of time spent hunting private land by zone.*

Zone	No Answer	< 25%	25-49%	50-75%	> 75%
Collins	27.7%	57.1%	0.6%	2.1%	12.7%
Horicon	37.1%	11.0%	1.2%	2.2%	48.6%

Table 18. *Reported use of the Intensive Management Subzone (IMS) in the Horicon Zone by time period.*

Period	Percent of hunters using the IMS	Mean percent of time spent in the IMS
1	30.0%	88.5%
2	33.8%	87.7%
3	35.5%	88.4%
4	27.4%	90.3%
Overall	32.8%	88.4%

Table 19. *Number of active hunters, percent paying blind access fee, mean days hunted, mean payment per trip, and total access fees paid by zone.*

Zone	Active Hunters	Percent Paying	Mean Days	Mean Payment	Total Paid
Collins	364	9.4%	4.9	$25.20	$4,224.99
Horicon	12,823	32.6%	3.6	$11.50	$173,064.34

Table 20. *Number applicants, active hunters, and birds harvested during the September early Canada goose season.*

Year	# of Applicants	# of Active Hunters	Harvest
1990	19,561	6,408	842
1991	4,772	1,983	712
1992	5,383	2,024	772
1993	2,982	1,636	679
1994	20,724	7,114	1,668
1995	13,343	7,923	4,928
1996	21,378	8,979	10,506
1997	28,761		7,435
1998	29,580		7,627
1999	73,799		6,032
2000	69,716		11,192
2001	74,268		15,952
2002	75,565		11,687
2003	76,728		8,650
2004	76,294		14,007
2005	74,437		13,410

Table 21. *Early September Canada goose harvest by date (bold numbers indicate weekends)*.

Date	Reported Harvest	Expanded Harvest	Percent	Cumulative Harvest	Cumulative Percent
1-Sep-2005	2,221	2,461	18.4%	2,461	18.4%
2-Sep-2005	1,371	1,519	11.3%	3,980	29.7%
3-Sep-2005	1,497	1,659	12.4%	5,639	42.0%
4-Sep-2005	1,028	1,139	8.5%	6,778	50.5%
5-Sep-2005	955	1,058	7.9%	7,836	58.4%
6-Sep-2005	399	442	3.3%	8,278	61.7%
7-Sep-2005	320	355	2.6%	8,632	64.4%
8-Sep-2005	337	373	2.8%	9,006	67.2%
9-Sep-2005	460	510	3.8%	9,516	71.0%
10-Sep-2005	925	1,025	7.6%	10,540	78.6%
11-Sep-2005	806	893	6.7%	11,433	85.3%
12-Sep-2005	285	316	2.4%	11,749	87.6%
13-Sep-2005	237	263	2.0%	12,012	89.6%
14-Sep-2005	525	582	4.3%	12,594	93.9%
15-Sep-2005	737	817	6.1%	13,410	100.0%
Total	12,103	13,410			

Table 22. *Early September Canada goose harvest by county (continued on the next page).*

County	Reported Harvest	Expanded Harvest	Percent
Adams	76	84	0.6%
Ashland	20	22	0.2%
Barron	614	680	5.1%
Bayfield	114	126	0.9%
Brown	684	758	5.7%
Buffalo	247	274	2.0%
Burnett	272	301	2.2%
Calumet	142	157	1.2%
Chippewa	234	259	1.9%
Clark	33	37	0.3%
Columbia	78	86	0.6%
Crawford	86	95	0.7%
Dane	381	422	3.1%
Dodge	279	309	2.3%
Door	532	589	4.4%
Douglas	93	103	0.8%
Dunn	80	89	0.7%
Eau Claire	13	14	0.1%
Florence	34	38	0.3%
Fond du Lac	154	171	1.3%
Forest	25	28	0.2%
Grant	46	51	0.4%
Green	37	41	0.3%
Green Lake	4	4	0.0%
Iowa	45	50	0.4%
Iron	23	25	0.2%
Jackson	37	41	0.3%
Jefferson	288	319	2.4%
Juneau	108	120	0.9%
Kenosha	216	239	1.8%
Kewaunee	248	275	2.0%
La Crosse	161	178	1.3%
Langlade	15	17	0.1%
Lafayette	8	9	0.1%
Lincoln	113	125	0.9%
Manitowoc	512	567	4.2%
Marathon	337	373	2.8%
Marinette	81	90	0.7%
Marquette	21	23	0.2%
Milwaukee	8	9	0.1%
Monroe	131	145	1.1%
Oconto	207	229	1.7%
Oneida	95	105	0.8%
Outagamie	228	253	1.9%
Ozaukee	90	100	0.7%

County	Reported Harvest	Expanded Harvest	Percent
Pepin	11	12	0.1%
Pierce	23	25	0.2%
Polk	735	814	6.1%
Portage	149	165	1.2%
Price	115	127	1.0%
Racine	195	216	1.6%
Richland	56	62	0.5%
Rock	282	312	2.3%
Rusk	86	95	0.7%
Saint Croix	267	296	2.2%
Sauk	52	58	0.4%
Sawyer	131	145	1.1%
Shawano	89	99	0.7%
Sheboygan	407	451	3.4%
Taylor	202	224	1.7%
Trempealeau	222	246	1.8%
Vernon	31	34	0.3%
Vilas	42	47	0.3%
Walworth	280	310	2.3%
Washburn	331	367	2.7%
Washington	270	299	2.2%
Waukesha	249	276	2.1%
Waupaca	125	139	1.0%
Waushara	31	34	0.3%
Winnebago	294	326	2.4%
Wood	178	197	1.5%
Total	**12,103**	**13,410**	

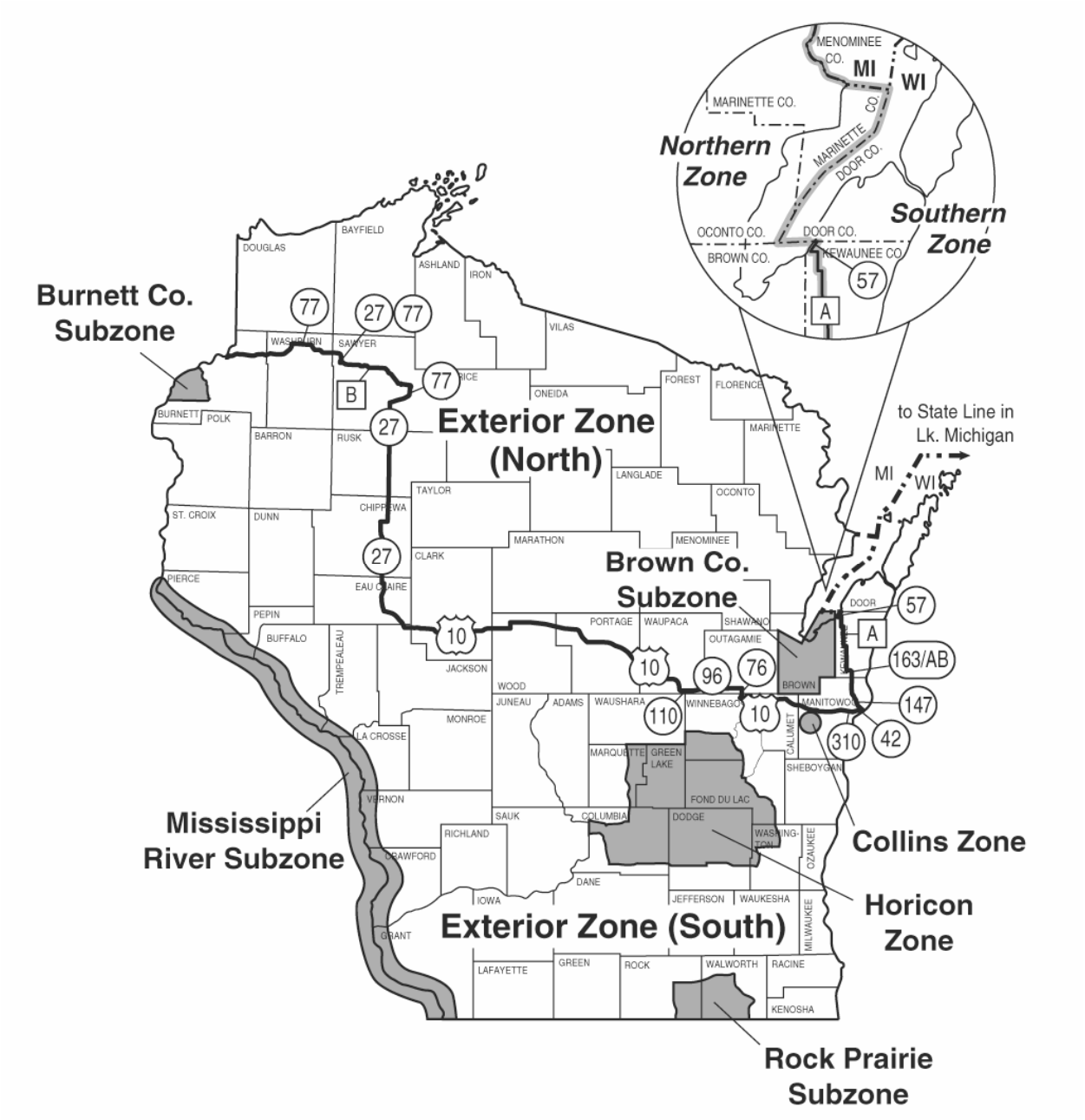
Table 23. *Early September season bag derived from mandatory reporting data.*

Bag	Hunters	Percent
0	71,009	95.4%
1	1,012	1.4%
2	691	0.9%
3	496	0.7%
4	360	0.5%
5	322	0.4%
6	138	0.2%
7	96	0.1%
8	74	0.1%
9	50	0.1%
10	56	0.1%
11	24	0.0%
12	16	0.0%
13	17	0.0%
14	5	0.0%
15	18	0.0%
16	5	0.0%
17	9	0.0%
18	8	0.0%
19	7	0.0%
20	3	0.0%
21	3	0.0%
22	2	0.0%
23	4	0.0%
24	3	0.0%
25	2	0.0%
26	3	0.0%
27	1	0.0%
28	2	0.0%

Table 24. *Percent of successful bags containing 1 or 2 geese.*

Zone	Period	Percent of 1 Kill Bags	Percent of 2 Kill Bags
Collins	1	62.0%	38.0%
	2	78.8%	21.3%
	3	80.5%	19.5%
	All Periods	**75.7%**	**24.3%**
Horicon	1	55.3%	44.7%
	2	67.4%	32.6%
	3	66.7%	33.3%
	4	47.2%	52.9%
	All Periods	**61.5%**	**38.5%**

Figure 1. Canada goose management zones and subzones



Appendix 1. Establishing harvest quotas for the regular Canada goose season

A number of our Canada goose hunters suggested that we include a section on how Canada goose harvest quotas are established. We agree that it would be of value to include a brief explanation of that process in this report.

We have two distinct Canada goose hunting seasons in Wisconsin. The Early September season which currently occurs statewide September 1 –15, and the regular season. Since the Early September season occurs before migrant goose populations from Canada arrive in the state, the harvest during this season does not count against our regular season quota. Currently, the quota applies only to seasons that occur on or after September 16, annually.

Our regular Canada goose season (that which begins on or after September 16 each year) is determined by the status of the Mississippi Valley Population (MVP) of Canada geese which nest on the Hudson Bay and James Bay lowlands, primarily in Ontario. As of 2005, band recoveries indicate that MVP geese make up about 48% of our regular season harvest. Annually, the U.S. Fish and Wildlife Service (FWS) establishes a maximum allowable harvest for this population, based on a recommendation from the Mississippi Flyway Council (MFC). The level of harvest is based on an estimate of the spring population (breeders and non-breeders) on the breeding grounds in northern Ontario and subsequent gosling production. The annual allowable harvest objective is set with the goal of having a spring breeding population of 375,000 for MVP Canada geese.

Once an allowable harvest level is set on the population, that harvest is allocated to major and other harvest states and provinces. Annually, about 80,500 MVP geese are allocated to the "other" harvest states and provinces. The balance of the allowable harvest is then allocated to the four major MVP harvest states as follows: Wisconsin-35%; Illinois-33%; Michigan- 20%; Kentucky-12%. Our MVP maximum allowable harvest in 2005 was 30,000.

During the regular season, we know that not all Canada geese harvested in Wisconsin are migrant MVP Canada geese. From band recoveries reported by hunters, we currently estimate that during the regular season, about 48% of the Canada geese harvested in Wisconsin are MVP geese, 49% are giants and about 3% belong to other migrant Canada goose populations. We account for this in our overall regular season Canada goose maximum allowable harvest. In 2005, our total maximum allowable Canada goose harvest was 62,500 (30,000 divided by 0.48).

We then allocate our total maximum allowable harvest to the 3 zones, taking in to consideration, number of hunters in each zone, bag limits, and season lengths. We also need to ensure that the Horicon Zone's quota is sufficient to address farmer concerns for agricultural crop damage.

We hope this explanation helps you understand how our quotas work.

The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Equal Opportunity Office, Department of Interior, Washington, D.C. 20240.

This publication can be made available in alternative formats (large print, Braille, audio tape, etc) upon request. Please call (608)266-8204 for more information.

WM-432

WISCONSIN DEPT. OF NATURAL RESOURCES

PRINTED ON RECYCLED PAPER

WILDLIFE RESTORATION

Federal Aid Project
funded by your purchase of
hunting equipment